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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,781	08/10/2001	Robert B. Nilsen	1571.2018-001	5446

7590 10/01/2004

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EXAMINER

SEFER, AHMED N

ART UNIT	PAPER NUMBER
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2826

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,781

Applicant(s)

NILSEN

Examiner

A. Sefer

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 511.

NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
4a) Of the above claim(s) 1-36 and 40-59 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 37-39 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/04 and 5/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on June 28, 2004 has been entered; no new claims have been introduced.

Response to Arguments

2. Applicant's arguments, filed June 28, 2004, with respect to Hansen et al. ("Hansen") USPN 6,348,995, Kawakami et al. ("Kawakami") (WO 00/08496) and Ouderick et al. ("Ouderick") USPN 6,262,842 in view of Hansen et al. US PG-Pub 2002/0015135 ("Hansen-135") have been fully considered. While the arguments with respect to Kawakami are persuasive, the arguments with respect to Hansen and Ouderick in view of Hansen-135 are not persuasive.

3. Applicant argues that the prior art does not disclose the device structure as recited in the claim. Particularly, Applicant argues that Hansen does not disclose a subwavelength moth-eye optical microstructure.

4. Applicant however, fails to elaborate on the argument that Hansen does not disclose a subwavelength moth-eye optical microstructure. In other words, Applicant fails to particularly point out the distinction between the invention of claims 37-38 and the prior art. If Applicant's argument is meant to imply that Hansen does not teach a subwavelength moth-eye optical microstructure having an amplitude (A) of 0.4 μ m and a period (P) of less than about 0.2 μ m and is sinusoidal, it is noted that such features are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read

Art Unit: 2826

into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As far as the light component parallel to the linear moth-eye structure being reflected and only the light perpendicular to the linear moth-eye structure being transmitted through, Hansen discloses (col. 3, lines 59-67) a polarizer device having a parallel arrangement of a plurality of thin, elongated elements each having an exposed surface which together form a textured surface; with such an arrangement the light component parallel to the plurality of thin, elongated elements is reflected and only the light perpendicular to the plurality of thin, elongated elements is transmitted through.

5. Applicant further argues that the combination of Ouderick in view of Hansen-135 do not teach the device structure as recited in claims 37-39.

6. In response, if Applicant's argument is meant to imply that Hansen does not teach a subwavelength moth-eye optical microstructure having an amplitude (A) of 0.4 μ m and a period (P) of less than about 0.2 μ m and is sinusoidal, it is noted that such features are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, while Ouderick discloses in fig. 2 a polarizer comprising a plurality of microstructures or at least 40 microstructures (as in claim 39), Hansen-

Art Unit: 2826

135 discloses (see figs. 8-9 and par. 0060 and claims 1 and 35) a polarizer device comprising an arrangement of elements having a period (P) less than 0.21 μm ; with such an arrangement the light component parallel to elements is reflected and only the light perpendicular to elements is transmitted through.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

8. Claims 37-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansen.

Hansen discloses (see fig. 5 and claim 39) a polarizer 45 comprising a plurality of moth-eye 46 (spacing or period is shorter than the wavelength) or a plurality of subwavelength moth-eye optical (as in claim 38) microstructures disposed on one another.

As for claim 39, the specification contains no disclosure of either the critical nature of the claimed arrangement or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ouderkirk in view of Hansen-135.

Ouderkirk discloses fig. 2 a polarizer 8 comprising a plurality of microstructures (2, 4) including at least 40 microstructures (as in claim 39) disposed on one another, but does not specifically disclose a plurality moth-eye or a plurality of subwavelength optical microstructures.

Hansen-135 discloses in figs. 8-9 a plurality moth-eye or a plurality of subwavelength moth-eye optical microstructures.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate Hansen's teachings with Ouderkirk's device since that would provide greater luminous efficacy as taught by Hansen-135.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2826

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANS
September 21, 2004